

We claim:

1. A system for the monitor and control from a remote location of at least one discrete measurable operational parameter of a manufacturing process for manufacturing composite articles at a manufacturing location comprising:
  - a. at least one sensor measuring said parameter of the manufacturing process for a composite comprising a resin and a reinforcement;
  - b. a signal generator connected to each of said at least one sensor for producing a digital signal for each of said at least one sensor;
  - c. a transmitter for transmitting said signals to said remote locations;
  - d. a processor provided at said remote location for processing said transmitted signals; and
  - e. a transmitter for sending operational instructions from said remote location to said manufacturing location.
2. The system of claim 1 wherein said parameter of the manufacturing process comprises a pressure within the manufacturing process.
3. The system of claim 1 wherein said parameter of the manufacturing process comprises the pressure of a flowable resin within the manufacturing process.
4. The system of claim 1 wherein said parameter of the manufacturing process comprises a flow rate within the manufacturing process.
5. The system of claim 1 wherein said parameter of the manufacturing process comprises the flow rate of a flowable resin within the manufacturing process.
6. The system of claim 1 wherein said parameter of the manufacturing process comprises a temperature within the manufacturing process.
7. The system of claim 1 wherein said parameter of the manufacturing process comprises the temperature of a mold within the manufacturing process.

8. The system of claim 1 wherein said parameter of the manufacturing process comprises the temperature of a flowable thermoplastic resin within the manufacturing process.

9. The system of claim 1 wherein said parameter of the manufacturing process comprises a cycle time or a cure time within the manufacturing process.

10. A system for the monitor and control from a remote location of at least one discrete measurable operational parameter of a manufacturing process for manufacturing a fiber reinforced thermoset product at a manufacturing location comprising:

- a. at least one sensor measuring said parameter of the manufacturing process for a composite comprising a thermoset resin and a reinforcement;
- b. a signal generator connected to each of said at least one sensor for producing a digital signal for each of said at least one sensor;
- c. a transmitter for transmitting said signals to said remote locations;
- d. a processor provided at said remote location for processing said transmitted signals; and
- e. a transmitter for sending operational instructions from said remote location to said manufacturing location.

11. The system of claim 10 wherein said parameter of the manufacturing process comprises a pressure within the manufacturing process.

12. The system of claim 10 wherein said parameter of the manufacturing process comprises the pressure of a flowable resin within the manufacturing process.

13. The system of claim 10 wherein said parameter of the manufacturing process comprises a flow rate within the manufacturing process.

14. The system of claim 10 wherein said parameter of the manufacturing process comprises the flow rate of a flowable resin within the manufacturing process.
15. The system of claim 10 wherein said parameter of the manufacturing process comprises a temperature within the manufacturing process.
16. The system of claim 10 wherein said parameter of the manufacturing process comprises the temperature of a mold within the manufacturing process.
17. The system of claim 10 wherein said parameter of the manufacturing process comprises the temperature of a flowable resin within the manufacturing process.
18. The system of claim 10 wherein said parameter of the manufacturing process comprises a cure time within the manufacturing process.
19. A system for the monitor and control from a remote location of at least one discrete measurable operational parameter of a manufacturing process for reheating thermoplastic at a manufacturing location comprising:
  - a. at least one sensor measuring said parameter of the manufacturing process for a composite comprising a thermoplastic resin and a reinforcement;
  - b. a signal generator connected to each of said at least one sensor for producing a digital signal for each of said at least one sensor;
  - c. a transmitter for transmitting said signals to said remote locations;
  - d. a processor provided at said remote location for processing said transmitted signals; and
  - e. a transmitter for sending operational instructions from said remote location to said manufacturing location.
20. The system of claim 19 wherein said parameter of the manufacturing process comprises a pressure within the manufacturing process.

21. The system of claim 19 wherein said parameter of the manufacturing process comprises the pressure of a flowable resin within the manufacturing process.
22. The system of claim 19 wherein said parameter of the manufacturing process comprises a flow rate within the manufacturing process.
23. The system of claim 19 wherein said parameter of the manufacturing process comprises the flow rate of a flowable resin within the manufacturing process.
24. The system of claim 19 wherein said parameter of the manufacturing process comprises a temperature within the manufacturing process.
25. The system of claim 19 wherein said parameter of the manufacturing process comprises the temperature of a mold within the manufacturing process.
26. The system of claim 19 wherein said parameter of the manufacturing process comprises the temperature of a flowable resin within the manufacturing process.
27. The system of claim 19 wherein said parameter of the manufacturing process comprises a cycle time within the manufacturing process.